

Notice of Allowability

Application No.

09/703,687

Examiner

Douglas Q. Tran

Applicant(s)

NAKAGIRI ET AL.

Art Unit

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 8/9/04.
2. ☒ The allowed claim(s) is/are 1-27.
3. ☒ The drawings filed on 02 November 2000 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

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Allowable Subject Matter

1. Claims 1-27 are allowed.

Claims 1, 9, 17, 25-27 are independent claims.

The following is an examiner's statement of reasons for allowance:

As to claims 1, 9, 17, the present invention from the application discloses a print control apparatus, a method and a control program comprises one of limitations: "a display means for (step of) the intermediate codes based on the display order of logical pages, that is an order of turning pages after binding the physical pages, as a preview on a screen when it is judged that bookbinding print is selected in the judging means (step) and the print preview image is displayed, wherein the output order of the intermediate codes set in the setting means (step) differs from the display order of logical pages, that is an order turning physical pages after bookbinding, for print".

As to claims 25-27, the present invention from the application discloses a print control apparatus, a method and a control program comprises one of limitations: "displaying means for (step of) displaying inconsecutive said intermediate codes in units of logical pages, which should be laid out at different physical pages, based on the display order of logical pages, that is an order of turning physical pages after bookbinding, as the preview image on a screen when it is judged that bookbinding print is selected by said judging means (step)".

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The closest prior art such as Munetomo et al. (US Patent No. 6,661,530 B1) and Tonkin (US Patent No. 6,134,568), including an updated electronic text search, fails to anticipate or render the above underlined limitations from **amended** claims 1, 9, 17 and new claims 25-27 obvious.

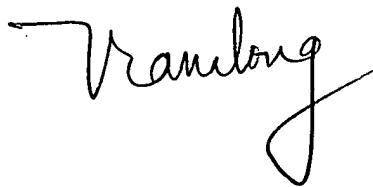
Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Contact information

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Douglas Q. Tran whose telephone number is (703) 305-4857 or E-mail address is Douglas.tran@uspto.gov.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4700.

Douglas Q. Tran
Jan. 07, 2005

A handwritten signature in cursive script, appearing to read "Tran Douglas", written in black ink.

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Examiner's amendment

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Frank L. Cire on Jan. 07, 2005.

Please amend the following claims 1, 5, 9, 15, 16, 17, 20, 22-27:

1. (Currently Amended) A preview image display method for displaying a print preview image, the preview image display locates in a print control apparatus having a bookbinding print function for printing a book formed by stacking multiple bookbinding units composed of a designated number of physical page, on which logical pages are rendered, folded once, said preview image display method comprising:

a converting step of converting a print command from an application into intermediate codes in units of logical pages;

a judging step of judging whether the bookbinding print is selected or not;

a setting step of setting an output order, which is a layout order of logical pages on physical pages, of the intermediate codes converted in said converting step when it is judged that bookbinding print is selected in said judging step and printing data is created;

an output step of outputting the intermediate codes converted in said converting step based on the output order set in said setting step; and

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a display step of displaying the intermediate codes converted in said converting step based on the display order of logical pages, that is an order of turning pages after binding the physical pages, as a preview image on a screen when it is judged that bookbinding print is selected in said judging step and the print preview image is displayed,

wherein the output order of the intermediate codes set in said setting step differs from the display order of logical pages, that is an order of turning physical pages after bookbinding, for print.

5. (Currently Amended) The method according to claim 3, wherein when one of right and left open directions is designated as the open direction, pages are rendered with pages that form spreads being located at neighboring [.] positions in the designated direction.

9. (Currently amended) A print control apparatus having a bookbinding print function for generating print data to be sent to a printer ~~and having a bookbinding print function~~ for printing a book formed by stacking multiple bookbinding units composed of a designated number of physical pages, on which logical pages are rendered, folded once, comprising:

converting means for converting a print command from an application into intermediate codes in units of logical pages;

judging means for judging whether the bookbinding print is selected or not;

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setting means for setting an output order, which is a layout order of logical pages on physical pages, of the intermediate codes converted by said converting means when it is judged that bookbinding print is selected by said judging means and printing data is created;

output means for outputting the intermediate codes converted by said converting means based on the output order set by said setting means; and

display means for displaying the intermediate codes converted by said converting step based on the display order of logical pages, that is an order of turning pages after binding the physical pages, as a preview image on a screen when it is judged that bookbinding print is selected by said judging means and the print preview image is displayed,

wherein the output order of the intermediate codes set by said setting means differs from the display order of logical pages, that is an order of turning physical pages after bookbinding, for print preview.

15. (Currently amended) The apparatus according to claim 9, wherein said output means ~~rendering unit~~ also renders page numbers of the pages in correspondence with the rendered outputted pages.

16. (Currently amended) The apparatus according to claim 9, wherein said print control apparatus further has an insert function of inserting a cover page, and said ~~rendering unit~~ output means renders a frame of the cover page to be inserted in the order after bookbinding when cover page insertion is designated.

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17. (Currently amended) A storage medium that stores a computer program for making a print control apparatus generate print data to be sent to a printer and display a print preview image, the print control apparatus having a bookbinding print function for printing a book formed by stacking multiple bookbinding units composed of a designated number of physical pages, on which logical pages are rendered, folded once, comprising:

a program code of a converting step of converting a print command from an application into intermediate codes in units of logical pages;

a program code of a judging step of judging whether the bookbinding print is selected or not;

a program code of a setting step of setting an output order, which is a layout order of logical pages on physical pages, of the intermediate codes converted in said converted step when it is judged that bookbinding print is selected in said judging step and printing data is created;

a program code of an output step of ~~for~~ outputting the intermediate codes converted in said converting step based on the output order set in said setting steps; and

a program code of a displaying step of displaying the intermediate codes converted in said converting step based on the display order of logical pages, that is an order of turning pages after bookbinding, as a preview image on a screen when it is judged that bookbinding print is selected in said judging step and the print preview image is displayed,

wherein the output order of the intermediate codes set in said setting step differs from the display order of logical pages, that is an order of turning physical pages after binding the physical pages, for print preview.

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20. (Currently amended) The medium according to claim 17 [19], wherein the outputting step includes the step of rendering while dividing pages into pairs of pages each of which form a spread after bookbinding.

22.[.] (Currently amended) The medium according to claim 19, wherein when a top open direction is designated as the [.]open direction, pages are rendered with pages that form spreads being located at vertically neighboring positions.

23. (Currently amended) The medium according to claim 17 [19], further comprising the page number rendering step of rendering page numbers of the pages in correspondence with the rendered pages.

24. (Currently amended) The medium according to claim 17 [19], ~~wherein said print control apparatus further has~~ comprising an insert function step of inserting a cover page, and the ~~rendering~~ output step includes the step of rendering a frame of the cover page to be inserted in the order after bookbinding when cover page insertion is designated.

25. (Currently amended) A preview image display method for displaying a print preview image, the preview image display locates in a print control apparatus having a bookbinding print function for generating print data to be sent to a printer for printing a book formed by stacking multiple bookbinding units composed of a designated number

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of physical pages on which logical pages are rendered, folded once, said preview image display method comprising:

a converting step of converting a print command from an application to intermediate codes in units of logical pages;

a judging step of judging whether the bookbinding print is selected or not; and

a displaying step of displaying inconsecutive said intermediate codes in units of logical pages, which should be laid out at different physical pages, based on the display order of logical pages, that is an order of turning physical pages after bookbinding, as the preview image on a screen when it is judged that bookbinding print is selected in said judging step.

26. (Currently amended) A print control apparatus having a bookbinding print function for generating print data to be sent to a printer ~~and having a bookbinding print function~~ for printing a book formed by stacking multiple bookbinding units composed of a designated number of physical pages, on which logical pages are rendered, folded once, comprising:

converting means for converting a print command from an application to intermediate codes in units of logical pages;

judging means for judging whether the bookbinding print is selected or not; and

displaying means for displaying inconsecutive said intermediate codes in units of logical pages, which should be laid out at different physical pages, based on the display order of logical pages, that is an order of turning physical pages after bookbinding, as the

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preview image on a screen when it is judged that bookbinding print is selected by said judging means.

27. (Currently amended) A storage medium that stores a computer program for making a print control apparatus generate print data to be sent to a printer and display a print preview image, the print control apparatus having a bookbinding print function for printing a book formed by stacking multiple bookbinding units composed of a designated number of physical pages, on which logical pages are rendered, folded once, comprising:

a program code of a converting step of converting a print command from an application to intermediate codes in units of logical pages;

a program of a judging step of judging whether the bookbinding print is selected or not; and

a program code of a displaying step of displaying inconsecutive said intermediate codes in units of logical pages, which should be laid out at different physical pages, based on the display order of logical pages, that is an order of turning physical pages after bookbinding, as the preview image on a screen when it is judged that bookbinding print is selected in said judging step.

Douglas Q. Tran
Jan. 07, 2005

A handwritten signature in cursive script, appearing to read "Tran Douglas", with a long, sweeping underline.